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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,693	04/30/2001	Erik R. Altman	Y0R9-2000-0844 US (8728-4)	2678

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EXAMINER

HUISMAN, DAVID J

ART UNIT	PAPER NUMBER
2183	

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Advisory Action**

Application No.

09/845,693

Applicant(s)

ALTMAN ET AL.

Examiner

David J. Huisman

Art Unit

2183

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 10 September 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see attached sheet.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1-21.

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☒ The drawing correction filed on 17 May 2004 is a) ☒ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

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Due to the amendments made to claim 1, applicant has changed the scope of claims 2-3 and 5-10. That is, prior to the amendment, the invention claimed in claim 2 comprised the invention claimed in claims 1 and 2. Now the invention claimed in claim 2 comprises the invention claimed in claims 1, 4, and 2. Consequently further search and/or consideration is required.

In addition, Applicant has argued the rejection of claim 11 on pages 11-12 of applicant's remarks, in substance that:

"Respectfully, Applicants believed that the Examiner has used impermissible hindsight in suggesting that, "It would also have been obvious to one of ordinary skill in the art at the time of the invention to modify the processor by providing the instructions of the second form (decoded instructions) in the parcel cache directly to the execution units" (see Response to Arguments, page 12, point 59). Soni is completely devoid of any teaching or suggestion of how a processor might function without a reservation station. Likewise, Johnson fails to teach or suggest a modification by which a processor might operate without a central window or reservation station. Therefore, the combined teachings of Soni and Johnson fail to teach or suggest the modification described in the Final Office Action at page 12, point 59. Even assuming, arguendo, that the modifications suggested in the Final Office Action at page 12, point 59 can be made, the combined teachings of Soni and Johnson fail to teach or suggest all the limitations of claim 11....Soni teaches that a reservation station is connected to the execution units. Soni fails to teach or suggest how to execute an instruction of the parcel cache without the reservation station."

These arguments, although fully considered, have been found non-persuasive by the examiner for the following reasons:

The examiner would like to bring Hennessy and Patterson's college textbook entitled, "Computer Architecture - A Quantitative Approach, 2<sup>nd</sup> Edition," 1996 (herein referred to as Hennessy), to applicant's attention. Hennessy is cited as extrinsic evidence by the examiner for showing that a reservation station is not required within a pipelined system. Please note pages 130 and 134, Fig.3.1 in Hennessy and note that decoded instructions are passed directly from the decode stage to the execution stage of the pipeline without the implementation of a reservation station. Soni specifically states in column 10, lines 29-35, that the the parcels may be provided to some other pipeline stage. The preferred embodiment is to provide them to the reservation station. However, Soni has made it clear that this is just one embodiment. The fact that Soni states that these instructions may be passed to some other pipeline stage is what the examiner is using in his obviousness-type rejection. The examiner's rejection stated that it would have been obvious to provide the parcels directly to the execute stage, as supported by Hennessy. By not sending the parcels to the reservation station, the size of the reservation station would be reduced because the reservation station would only need to hold instructions that have just been decoded as opposed to these instructions plus the parcels. Consequently, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Soni such that the parcels are sent directly to the execution units as opposed to the reservation station. And, one would have been motivated to make such a combination because Soni has taught that the parcels may be sent to other pipeline stages, Hennessy has taught that not using a reservation station is a well known concept in the art, and by bypassing the reservation station, the size of the reservation station may be reduced.

  
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